

Figure 12.——Seven day low-flow frequency curve for the Atlantic Intracoastal Waterway near Myrtlewood Golf Course (02110760), South Carolina.

The scatter about the regression line in figure 10 is caused by the effects of tide and wind on flows in the AICW in addition to errors inherent to any such regression. Inspection of figure 11 shows that equation 5 somewhat smooths out a 15-day tidal cycle. Therefore, a low-flow frequency relation developed using 7-day average discharges calculated from equation 5 may provide higher discharges for higher recurrence intervals than one developed from measured minimum 7-day average discharges.

The standard errors of estimate of equation 5 were used to construct lines about the low-flow frequency curve in figure 12 to illustrate the range of accuracy of the data from which it was derived. The standard error of estimate can be interpreted to mean that approximately two thirds of the data lies within 33 percent of the regression. The bounds of the standard error of estimate in figure 12 may represent an approximate range of tide and wind effect about equation 5.

LOCATION OF SALTWATER-FRESHWATER INTERFACE

Specific conductance was used as an indicator of the concentration of the chloride ion of the water in the AICW. Water samples collected in the study reach were analyzed for specific conductance and chloride ion concentration and the data were used to establish the relation between